



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80C2A8
 UNIQUE ID NUMBER: 1GE021
 COMBUSTOR:
 ENGINE TYPE: TF

BYPASS RATIO: 5.1
 PRESSURE RATIO (π_{00}): 31.0
 RATED THRUST (F_{00}) (kN): 257.4

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	15.1	62.0	50.4	9.6
AS % OF ORIGINAL LIMIT	77.0	52.5	49.4	52.6
AS % OF CAEP/2 LIMIT (NO _x)			61.7	
AS % OF CAEP/4 LIMIT (NO _x)			73.0	
AS % OF CAEP/6 LIMIT (NO _x)			82.6	
AS % OF CAEP/8 LIMIT (NO _x)			96.7	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.507	0.08	0.52	33.50	8.2
CLIMB OUT	85	2.2	1.953	0.09	0.52	22.00	4.9
APPROACH	30	4.0	0.655	0.20	2.05	9.00	2.3
IDLE	7	26.0	0.205	9.20	42.30	3.70	3.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			840	3005	14039	11797	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				11.6	54.4	45.8	8.2
SIGMA (D _p /F ₀₀ in g/kN, or SN)				1.3	3.1	1.8	
RANGE (D _p /F ₀₀ in g/kN, or SN)				10.52-13	51.75-57.31	44.33-47.72	

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.4-97.8
TEMPERATURE (K)	287-296
ABS HUMIDITY (kg/kg)	0.0084-0.014

FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	15.3

MANUFACTURER: General Electric Company
 TEST ORGANIZATION: CF6 Eval Engineering
 TEST LOCATION: Site IIIC, PTO, Peebles, Ohio
 TEST DATES: 29/05/1985-03/06/1985

REMARKS

1. Ref GE Report R90AEB379. Engine S/N's 690105 and 690005/2.

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)